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Bloomberg Businessweek

The Fight Over Fracking in Colorado's North Fork Valley

By Peter Heller on July 12, 2012

The creek above Paonia is slowing to a trickle in July's heat, the watershed as dry as those that recently burned for two weeks outside Colorado Springs. But in late May it was running fast and milky with snowmelt. Fallen trees propped on rocks threshed the current. A light wind carried the smell of cold stone and spruce, and upstream in the V of the little canyon I could see Mount Beckwith and the green aspen on its shoulders. On the gravel bars, white moths flitted in and out of sunlight. I'd already crossed the fresh tracks of elk, deer, and bear. I waded up the middle, casting to either side, and when I caught two heavy rainbows I zipped them into my vest and headed back to the truck. I hummed as I walked, happy to be back after a month away.

Twenty-two years ago, I built a small off-the-grid adobe house beneath the mountain. Like a lot of others who came to the North Fork Valley, I never really left. When I hunt, I walk out the front door and onto the mountain in the dark. My wife and I bike and ski all over the surrounding ridges, within minutes of town. We live mostly in Denver, but go back to the house as often as we can.

With the trout in a cooler, I drove along the North Fork of the Gunnison River. The road passed a mile of orchards along the river and little signs: Holy Terror Farm, Stone Cottage Cellars, Black Bridge Winery. As the road descends and the valley opens up, Paonia looks like a train set bedded in farms, orchards, and ranches, beneath the rugged peaks of the West Elk Wilderness. In recent years magazines and travel programs have taken to calling this valley, with its three small towns, the Golden Triangle, for its quality of life and exploding food and wine scene.

The place has changed a lot in two decades. For one thing, back in 1990, most of the organic farms and

vineyards along Colorado State Highway 133 didn't exist. The only crop Paonia was nationally famous for was Paonia Purple, a potent strain of marijuana. Since then, the valley has become a leader in sustainable agriculture and home to the largest concentration of organic farms in the Rocky Mountains. According to the U.S. Department of Agriculture's 2007 census, direct sales of farm products (via farm stands, farm-to-home cooperatives, etc.) in the county, with over 90 percent coming from the North Fork Valley, are some of the highest in the rural U.S. Last summer 80 chefs came to the valley to do farm-to-table workshops. The valley produces 77 percent of the state's apples, 71 percent of its peaches.

The vineyards quilting the hillsides are also fairly new. With seven wineries, the North Fork Valley has become one of two certified American Viticultural Areas in Colorado and is gaining an international reputation for handcrafted wines made from the highest altitude vineyards in the Northern Hemisphere. A new book, *An American Provence*, waxes poetic about the similarities between North Fork and the Coulon River Valley in the south of France.

As word of the scenic beauty, organic farms, artisanal food, and world-class wine has spread, there's been a steady influx of professionals who work remotely, as well as wealthy quality-of-lifers. Several of my neighbors arrived from Jackson Hole and Aspen, looking for a place as beautiful, but without the built-up-resort vibe. Joe Cocker lives in Crawford. Bill Koch has been a resident since 2007. The 310th richest man in the world, Koch is less well known than his brothers Charles and David. They inherited Koch Industries, now the second-largest privately held company in the U.S., from their father, Fred Koch, who invented a process for refining heavy oil. Charles and David bought out Bill and the fourth brother, Frederick, in 1983.

One thing that hasn't changed in the valley in 20 years is the region's close, sometimes fraught relationship with energy extraction. Since World War II, by far the biggest employers have been the three coal mines that sit out of sight 8 to 10 miles upriver. They're still active, but running out of coal. One is owned by Koch, who's trying to open another near the town of Hotchkiss. Many locals strenuously object, while others look forward to the jobs it would create. But generally the relationship between the towns and the mines has been one of respectful coexistence if not loyalty, with local environmentalists conceding that the mines have been responsible corporate citizens. Ed Marston, former editor of the *High Country News*, the environmental paper of record for the American West, says, "For one thing, their presence has kept us from becoming a life-style and recreational community."

Then, this winter, everything changed. A new contest between heavy industry and the valley's evolving brand of sustainable agriculture intensified. This time it wasn't about coal; it was about natural gas.

The first bomb dropped on Dec. 8, when the Bureau of Land Management (BLM) announced that 30,000 acres in 22 parcels along the North Fork were being nominated for oil and gas development. It's all Mancos shale here, so that meant hydraulic fracturing, or fracking, the process by which water mixed with chemicals and sand is injected at high pressure as much as 10,000 feet beneath the surface or on a horizontal plane to release trapped gas.

There is a lot to frack. Colorado has an estimated 23 trillion cubic feet of dry natural gas reserves (8.5 percent of all U.S. reserves), and a few areas in the state are in the middle of booms. One is Weld County, on the Front Range, northeast of Denver, where over 20,000 oil and gas wells make it the most intensely fracked county in the U.S.; another is Garfield County in the Colorado River corridor, where the river flows through the towns of Silt, Rifle, and Parachute, and where companies such as Antero Resources, EnCana (ECA), and WPX Energy (WPX) are drilling to the edges of suburban development.

Energy is a lonely bright spot in a state economy that has been struggling. According to the Colorado Oil & Gas Association, natural gas now supports 137,000 jobs in Colorado, or roughly 6 percent of total employment. The industry represents 7.3 percent of the state's economy. Just two companies, Anadarko Petroleum (APC) and Noble Energy (NBL), are planning to pump \$15 billion of investment into Weld County in the next few years.

Despite assurances from industry leaders that it can regulate itself, there have been controversial messes—not just flaming faucets propaganda, but well-documented cases of air and groundwater contamination—and mounting concerns about threats to public health. A 2011 study of natural gas drilling emissions by the National Oceanic and Atmospheric Administration in Weld County found that wells are releasing twice as much methane as previously estimated, as well as surprisingly high emissions of the carcinogen benzene and other pollutants that are spiking in Denver's air. (Anadarko declined to comment on the NOAA study. Noble did not return my calls on deadline.) Also last year, the Environmental Protection Agency linked the contamination of an aquifer at Pavilion, Wyo., to nearby fracking.

The leftover "produced water" is often briny and radioactive. Roads are built all over the landscape to reach the drill pads, and it takes hundreds of truck trips to develop each well. Aggressive drilling in rural communities has raised questions about whether there should be areas that are simply inappropriate to frack, and if the process for making that decision is effective.

Those of us with a stake in Paonia were about to find out as the new year approached. "It's like somebody had it out for the North

Fork,” said Bill Brunner, a local business owner and old friend who’d been studying the parcels nominated for drilling online. “It’s like a choke collar,” he said.

The BLM had given until just Jan. 9 for public comment: four weeks over the holidays. Within days of the BLM announcement, locals put up a Facebook page, with detailed maps, called North Fork Fracking. The parcels were outlined in red. Numbers 6197 and 6194 spread over the base of Mount Lamborn and Land’s End, the swooping double peak above my house that graces a dozen fruit labels. The red border sliced a corner into the slope maybe a mile from my back fence. The rest of the parcels ringed the valley on all sides. They came right to the edge of houses, schools, and organic farms in the three hamlets of Hotchkiss, Crawford, and Paonia. Nobody knew who nominated the parcels. The BLM was mum. The nominating process is anonymous.

Paonia has 1,500 people and 26 churches. It has an American Legion Hall and a bow hunting club. But it also has a legendary volunteer-run public radio station and the High Country News. There are a handful of centennial ranches in the valley—in the same family for over 100 years. It’s an unlikely, sometimes argumentative blend of coal miners, cowboys, hippies, and environmental journalists, and so maybe not the best place for the BLM to get into a fight.

On Jan. 4, I drove from Denver to Paonia for a public meeting on the leases. I stopped in at Alfred Eames Cellars just up the road from my place at the base of the mountain. Eames Petersen was always good for the long view. He’s a musician who planted his vineyard in 1994 and has already beaten out French wines at juried tastings. He makes wind chimes out of all the medals he’s won. “You know,” Eames said, “if they drill here, people probably won’t come to wine tastings, might not even buy the wines. For us, the perceived threat of pollution is as bad as the real thing.”

Bobby Reedy couldn’t give a damn about fine wines. He drinks Bud Light. I pulled into Reedy’s Service, a gas and repair station in the middle of Paonia run by three generations of Reedys. Bobby was relaxing on the beat-up couch in the front office after driving the afternoon school bus. On the wall was a framed photo of him in the snow holding a mountain lion he shot with his bow. Hunters come from all over the country to camp for weeks at a time and stalk elk and deer above the valley. Others come to fish the gold medal trout waters on the Gunnison where it meets the North Fork below Hotchkiss. Reedy is a card-carrying redneck. His wife Donna used to be a long-haul trucker. We don’t agree on a single political thing, and he is one of my best friends. That’s the thing about a small town.

The first public hearing in Paonia about the fracking leases was that evening. “You going?” I asked Reedy. “Bowling night.” He grinned. “OK, tell me,” I said. He put in a big chew, handed me the can. “Look,” he said, “when I come home I wanna flick the light switch and know the lights are gonna come on. If it’s not in my backyard, whose is it gonna be in?” He paused. “But we’ve gotta make sure they do it right.”

How do you frack right? Can it even be done? Many environmentalists, including Bill McKibben and Robert Kennedy Jr., initially supported natural gas as a “bridge fuel” between greenhouse gas-intensive fuels such as coal and newer, cleaner technologies like solar panels, but have since backed away in light of an avalanche of studies and anecdotal evidence about groundwater and air pollution, landscape and habitat destruction, and far more methane emissions from drilling than previously thought. Governments at every level have been struggling with these questions. Colorado’s Boulder County and the state of Vermont have placed a moratorium on fracking for now, raising legal questions about who can properly make those decisions.

The mood at the meeting in the Paonia Junior High gym that night was deadly earnest, and it was not one of compromise. More than 400 people packed the bleachers and the folding chairs on the basketball court. A hundred more stood in back. Farmers, professionals, old, young. A portable movie screen stood on the west foul line showing a projected 3D Google (GOOG) satellite map of the area. When the local environmental groups sponsoring the meeting, Citizens for a Healthy Community and the Conservation Center, began a virtual flyover of the valley, you could have heard a drilling permit drop. “Here,” a clean-cut kid said evenly, without emotion, “we’re looking north again, here is where the drilling lease comes down to the running track at Hotchkiss High School. Zoom in, the oval of the track, the edge of the drilling parcel.” Wave of murmurs. “Here, you can see the slopes are very steep, this parcel comes to within about 400 feet of the elementary school in Crawford. ... Here is the base of Mount Lamborn.” I leaned forward; it was right above my house. “Two of the town springs are on this one, here and here.”

“Where will the water come from?” a woman on the bleacher next to me asked. “Doesn’t it take something like a million gallons for each gas well? We already have a moratorium on new water taps.” The shock in the gym felt like the pressure drop before a tornado. What Brunner had told me in that first call was graphically portrayed: a noose around a way of life. A panelist said it took 1,000 to 1,500 truck trips to develop each fracking well. Think what that would do to your road and the three spots where highways come into the valley, he said.

Daniel Feldman, a consulting psychologist who works with government agencies and corporations, told the audience that thanks to an outpouring of calls and e-mails, the comment period had been extended by the BLM to Feb. 9. He said to go to the parcel maps on the wall and find where you live, work, or hunt, and note every domestic well, spring, irrigation ditch, hunting area, farm, and school that would be negatively affected by drilling. He said to be specific. Put it in your comment letter. And then Feldman mentioned what was the most jaw-dropping revelation: "The resource management plan, or RMP, the BLM is required to have for the valley is 23 years old. From 1989. A lot has happened since. They need to know what's here."

The BLM is a "multi-use" agency, mandated to consider and balance the resources in an area before making decisions like this. Most of the wineries, organic farms, and schools were not even here in 1989. At another packed community meeting in the tiny town of Crawford, multigeneration family rancher Ronald Klaseen said, "I don't think there's a way it's done right."

Few in the North Fork are unequivocally opposed to oil and gas development. The question always comes back to where. A highly placed official in Colorado's Department of Natural Resources, who asked that his name not be used because of sensitivity in state government about criticizing oil and gas, says that the industry is tone-deaf to this question, and it's hurting them. If they could be more sensitive about where not to drill, they'd be much better off, he says, adding that the North Fork was probably one of those places.

The Colorado office of the BLM, which would be making the decisions on the North Fork leases, proved surprisingly direct. Asked about proposed drilling parcels within yards of schools, parcels straddling irrigation ditches for scores of organic farms, and one that encompasses Deep Creek, habitat for the very rare native trout, Steven Hall, the communications director, said: "None of the issues you just raised are incompatible with oil and gas development." He added, "Look, one of the reasons these are probably so controversial is that if you walk out of the High Country News with your cup of herbal tea you can see some of these parcels."

If none of those issues was incompatible with oil and gas development, I thought, why even conduct the required environmental assessment? It seemed to me that they had already made their decision. I wanted reassurance.

Colorado Governor John Hickenlooper is an old friend, so I called him to see where he stood. He's a practical leader with immense integrity. He's seen as a friend of oil and gas—he first came to Colorado as a petroleum geologist—but he was also a leading force in getting the state to pass some of the strictest fracking fluid disclosure requirements in the nation. The decision on the leases was federal, but this is his state.

I mentioned that a recent study by Colorado State University found that in 2006 13.2 million visitors engaged in some form of agritourism in Colorado, spending \$1.26 billion, and noted that North Fork farms are supplying food all over Colorado's Western Slope. Was more gas worth jeopardizing that? Hickenlooper says there's a federal process in place to determine where it's appropriate to drill, and the BLM doesn't have a lot of discretion when parcels are nominated. "The most recent resource management plan was back in 1989, which is somewhat unusual," he allowed. "The BLM does have the discretion to conduct a full environmental impact statement instead of the shorter environmental assessment. I guess that this might be warranted here." He added that he had just been over to Montrose and Grand Junction, where he was getting the other side of the argument in stereo: "There is a large contingent of people who work in the oil and gas industry who don't have work. They are determined that just because some rich people come in with their interpretation of what's beautiful, that shouldn't limit them from being able to have jobs. The trick is to figure out where is the appropriate compromise."

U.S. Senator Mark Udall (D.-Colo.) made an equally anodyne statement: "No one disputes our country's need to develop domestic energy resources, but that has to be balanced with the economic and quality-of-life considerations of those whose lives and livelihoods will have to exist alongside the energy development."

In the weeks that followed, the marshaled force of outrage along the river shocked even the environmental groups. It felt peculiarly American. It reminded me of one of those Westerns where the homesteaders get all fired up to beat back the rich and unscrupulous rancher. On the groups' behalf, the Western Environmental Law Center in Taos, N.M., filed a Freedom of Information Act request for the name of the entity that nominated the parcels. It was still mid-January. Mitchell Gershten, a local physician, said: "This is our land. If someone wants to come onto my land with a shovel, I want to know who it is."

The government responded promptly and released the nomination form. The name was blacked out. Public anger was so great that Gunnison Energy, Koch's company, announced that it had nominated the three parcels near the Paonia Reservoir but had not nominated the other 19. Brad Robinson, Gunnison's president, said that he had "no interest" in the other parcels. This was followed by a similar statement from SG Interests, another oil and gas company active in the area, which denied nominating any parcel. Maybe the companies really were sensitive to bad PR. (In mid-February, the two companies would settle an antitrust

lawsuit with the U.S. Department of Justice that alleged that they had colluded on bidding for BLM mineral leases.)

The BLM's Uncompahgre Field Office in nearby Montrose, responsible for the resource management plan and for making recommendations on the parcels, received thousands of letters. In the next few weeks dozens of commercial organizations, government entities, and environmental groups wrote letters to the BLM. Realtors across the board emphatically opposed the lease sale, citing a real estate economy just getting back on its feet and already seeing the negative effects of the drilling threat. The West Elks Winery Association wrote a 15-page letter. The commissioners of both Delta County and adjacent Gunnison County wrote asking for a postponement of all action regarding the Aug. 9 lease sale until an updated RMP could be completed. There were just too many new factors since the 1989 resource plan, including a 47 percent increase in Delta County's population. (The Delta commissioners later backed off, asking only that some of the parcels be removed.)

Ranchers objected to the parcels as a threat to their irrigation. The Paonia town council wrote, asking that parcels on Mount Lamborn be removed from consideration because the town water supply came from up there. They also asked for the removal of any parcels up valley where a spill would contaminate irrigation water. All of these were traditionally conservative government and administrative bodies. This didn't sound like rich people with a special "interpretation" of beauty. This sounded like locals trying to protect their way of life.

"We have 19 town springs along the base of that mountain. Two sit directly on proposed lease parcels," said Paonia Mayor Neal Schwieterman, on Feb. 8. He pointed to a ridge across the valley and at Mount Lamborn. "We have a spider web of shallow old pipes all across there. Heavy truck traffic, any kind of accident—it's unacceptable to put an entire town's water supply at risk."

Accidents that affect water do happen. In September, the Denver Post reported that so far in 2011, 58 spills had contaminated Colorado groundwater, and streams had been contaminated 18 times. "The trucks are scary," said my biologist friend, Jim LeFevre, in the Flying Fork restaurant that night. "I have a biologist friend who worked over by Rifle doing studies. He finally called his boss and quit. He said the truckers drove so crazy on those little roads he knew that if he stayed he'd get killed."

On Feb. 9, the last day of the extended comment period, I drove to the Montrose office of the BLM. I observed a flash mob, speeches, signs from about a hundred protesters from the valley. Barb Sharrow, the manager of the Uncompahgre Field Office, said she'd received thousands of letters against drilling the North Fork. Why, I asked, was the current resource management plan 23 years old? "We are putting together an RMP now," she said, adding that it would be done in about two years. Then she explained that the environmental assessment—another tool altogether—would be completed by March 9, just three months after the parcels were nominated. She said the relatively quick assessment would be used to find any new issue or problem that wasn't analyzed adequately in the old management plan. "If issues weren't adequately analyzed before, we would certainly mitigate those concerns," she said. "Or we might have to recommend that a certain parcel or a portion of a parcel be deferred." Accidents, said Sharrow to several protesters who caught her in the lobby, happen in every industry, "even in organic farming." Essentially, they were going to use an EA, a much less thorough exercise, to see where an outdated RMP was no longer up to snuff. Then they would drill.

Much of the valley waited anxiously for the environmental assessment. It finally came in April. The BLM released an EA that pulled 6,000 of the proposed 30,000 acres from the lease sale, the majority on slopes steeper than 40 percent. None of the valley's concerns about town water, irrigation, or the proximity of schools were addressed. The North Fork was in deep shock. Then, a month later, on May 2, the BLM abruptly announced, in a three-sentence statement, that they were deferring the entire lease sale. The statement said: "BLM has opted to conduct additional analysis of the proposed lease parcels based on public input." A stay of execution. But for how long? The relief everywhere in Paonia was uneasy, the fear just under the surface. The BLM still hadn't named the nominators. It had not decided that the North Fork was an inappropriate place to frack but instead "deferred," which local activists consider a tactic to cool the opposition. Robyn Morrison, a member of Citizens for a Healthy Community, said her group had met with BLM's Sharrow in the last few weeks, and "she told them to expect some of the leases to come up again within the year."

On a recent trip to Denver, I stopped in Parachute, west of Rifle, where intensive fracking has been going on for about seven years. My guide was 74-year-old Bob Arrington, a mechanical engineer who used to work for power companies. We drove along the Colorado River and up and down side canyons. The truck traffic was intense: tanker trucks, drilling rigs. Every road was beat up, shattered, potholed. Drilling pads rashed the hillsides. Huge fenced-in equipment yards checkered the flats. We drove by a Williams gas plant, where the natural gas is prepped for transport. The compressors used to move the gas into bigger pipelines sounded like 747s waiting to taxi. The plants themselves looked like scaled-down versions of the refineries in Houston and Northern New Jersey. The entire valley was industrialized. We crossed the Colorado at the Una Bridge and turned upstream along a small county road. In two miles our way was blocked by a group of trucks. I blinked. One tanker truck, a semi, was being hoisted by a giant tow truck up a steep bank. Its cab was completely crushed. Two other tankers were parked beside it. They were

pumpers. Big hoses ran down the bank and they were pumping up whatever had spilled out of the wrecked truck as fast as they could. There was no fire department, no sheriff, no hazmat, no police.

I walked up and asked about the driver. "He alright?" A couple who seemed to be supervising said he'd gone to the hospital. Pointing to the hoses, I said: "Those are produced waters, huh? That came out of the well?" "Yup," the man said. Then the woman shot me a look, suspicious and cold. "Who are you?" she demanded. "Just passing by," I said. I walked back up the road and snapped a bunch of pictures with my phone.

As we drove away I called a reporter at the nearby Glenwood Springs Post Independent and told him where to find the wreck. "Oh, man, thanks!" he said. I suggested calling the hospital to ask about the driver. "Nah, they won't cooperate," the reporter said, referring to the Grand River Medical Center in Rifle. "They're completely owned by the oil and gas companies."

Arrington agreed. When the Garfield County health department and the University of Colorado's School of Public Health tried to study the health effects of drilling, he said, the hospital refused to cooperate. "The study got to be too politically hot, and the commissioners dropped it," he said. The hospital did not respond when asked why it declined to participate in the health impact assessment. Another study, led by Garfield County oil and gas liaison Judy Jordan on the rising gas levels in aquifers was taken out of her hands in its final phase and reassigned to NOAA and Colorado State University, among others. Garfield County Commissioner Mike Samson said Jordan's study "became a political football."

I drove home. On Interstate 70 in late afternoon, the rock of Glenwood Canyon was blood red. It climbed in sheer walls, the broken ledges limned with pines. Beneath them, the Colorado ran as it always had, deep green, unhurried. I felt a cold and growing fear. That was it. The reporter had articulated the dread: that once a gas and oil company gets into your valley, they own you. They own the hospital. They own the commissioners. They own your mountains, and they will do what they want.

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